

ABSTRACT

There is provided a method of producing a semiconductor device in which TAT can be improved while withstand voltage of a damaged insulating film is secured. A TEOS film is formed to cover a gate wiring line on a substrate, and a side wall is formed on a wall of the gate wiring line through the TEOS film. After ion implantation is carried out from above the side wall, the side wall is removed by dry etching. Thereafter, the surface of the TEOS film is exposed to a film formation atmosphere of the TEOS film. By this, the damage given to the surface of the TEOS film by the dry etching for removing the side wall is restored. Then, the withstand voltage of the TEOS film is secured without forming a new film for reinforcement.